

PROCEEDINGS
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MAMMALS FROM YUNNAN AND TONKIN.

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The Museum of Comparative Zoölogy has lately received a small collection of mammals from Tonkin and the neighboring portion of southeastern Yunnan, China. These were obtained from the same region whence the British Museum recently had a collection containing sundry remarkable novelties, described by Thomas and Dollman. Two of the squirrels in this second collection seem to represent undescribed races, and these are here named. I have also appended some additional notes on a fine adult male of the new snub-nosed monkey of Tonkin described by Dollman.

Sciurus castaneiventris haemobaphes subsp. nov.

Type.—Skin and skull, male, M. C. Z. 13,693, from Chih-ping, southeastern Yunnan, 26 February, 1911.

General characters.—A small squirrel of the *castaneiventris* type, differing from other described forms in the combination of blackish fingers and toes, buffy to pale ochraceous ears; the mixture of ochraceous hairs with the otherwise clear hazel of the throat, producing a more or less yellow patch, and the restriction of the bright hazel of the inferior side of the hind legs to a narrow area that does not quite reach the heel and does not include the anus and base of the tail.

Description.—Head, including cheeks and chin, dorsal surface of body and of limbs except the feet a uniform grizzled cream buff and black, slightly darker over the mid-dorsal area, where the individual hairs are either entirely black or black with one or two buff rings. Those with a buffy ring of about 2 mm. and a long black tip of 6 or 8 mm. predominate. On the tail these rings increase in number and extent, and form on the terminal two-thirds indistinct transverse bands, with an outer fringe formed by the long buff or ochraceous tips. At the tip of the tail the terminal ochraceous band and the subterminal black portions of the hairs are much longer than elsewhere and form thus a black patch with a dis-

tinct ochraceous tip. The ears are covered with short buff hairs, becoming in some specimens ochraceous but never the bright hazel of the belly. Feet darker than the back; the toes nearly black with a fine ticking of buffy. The under surfaces of body and limbs, except the chin, are clear bright hazel mixed on the upper throat with ochraceous hairs which stand in strong contrast and vary in amount from a few in the median line to a distinct patch tapering to the middle of the chest. The anal region and base of the tail below are like the back, instead of being included in the general chestnut color of the belly.

Skull.—The skull is distinctly smaller than that of the neighboring race *bonhotei* of which the Museum has a series from Szechwan.

Measurements.—The type was measured by the collector as follows: head and body, 240 mm.; tail, 155; hind foot, 51; ear, 24. The skull measures: condylobasal length, 48 mm.; basal length, 45; zygomatic breadth, 20; interorbital constriction, 17; nasals, 14; diastema, 10.5.

Remarks.—The Museum of Comparative Zoölogy has a fine series of *S. c. bonhotei* of Szechwan lately described by Messrs. Robinson and Wroughton, so that I have been able to make direct comparison between this and the series from the lower country in extreme southeastern Yunnan. The larger size, more buffy upper surfaces, bright chestnut ears, and clear ferruginous underparts including anus, base of tail, and legs to the sole of the feet distinguish *bonhotei* at once. From *S. c. michianus*, described by the same authors,* from Mee Chee, Yunnan, it differs in having the ears much paler than the belly, the hands and feet nearly black, and the hazel of the throat more or less mixed with ochraceous anteriorly. According to Bonhote, typical *castaneoventris* is found in Fokien to the northeast, and he has described a grayer race from Ningpo. The new subspecies here recognized seems to represent a southeasterly offshoot in the low hill country of this part of Yunnan.

***Dremomys pernyi flavior* subsp. nov.**

Type.—Skin and skull, male, M. C. Z. 13,691, from Mongtz, southeastern Yunnan, 1911.

General characters.—Similar to *D. pernyi* but smaller and yellower in general coloration. The median area of the under side of the tail is yellowish or buffy instead of whitish.

Description.—Entire upper surface of the head (except ears), neck, body, limbs, and base of tail a nearly uniform grizzled buffy and black, slightly clearer buff on cheeks and hips, and with an ill defined pale buff eyering. Both surfaces of the ears covered with short hairs of a pale ochraceous-rufous, deepest at the posterior basal portion. Chin, throat, belly and inner sides of the legs white, washed with pale buff on the throat. The white hairs, except on the chin, have dark slaty bases. Anal region pale ochraceous-rufous, this color extending on to the base of the tail below, and the inner sides of the tibial margin of the legs.

Above, the tail is colored at the base like the back, but distally the

* Robinson, H. C., and Wroughton, R. C. On five new sub-species of Oriental Squirrels. Journ. Federated Malay States Museums 1911, vol. 4, p. 234.

hairs become tricolor, ochraceous-buff at the base, followed by a broad black band, and succeeded by a long white tip, so as to produce a somewhat barred effect with a white fringe. Below, the central area of the tail except at the very base, is cream buff, bordered by black and fringed with white, thus differing markedly from *D. pernyi* in which the long white-tipped hairs cover the greater part of the lower side.

Skull.—Compared with a series of skulls of typical *pernyi* from Szechwan in the collection of the Museum, that of the new race is decidedly smaller and with apparently shorter nasals.

Measurements.—The skin of the type bears the following measurements made by the collector: head and body, 164 mm.; tail, 126; hind foot, 38; ear, 24. The skull, which unfortunately lacks the condylar portion, measures: occipito-nasal length, 47.5; nasals, 16; fronto-parietal suture to tip of nasals, 36; least interorbital width, 14; zygomatic breadth, 23; diastema, 11; upper cheek teeth, 9.

Rhinopithecus avunculus Dollman.

In the Proceedings of the Zoological Society of London, 1912, part 2, p. 503, Mr. Guy Dollman has lately described a fourth species of the remarkable snub-nosed monkeys of eastern Asia. The type was an adult female from Yen-bay, Tonkin, and the specimen was accompanied by a young animal. The coloration is described as in general, "with dorsal surface of body black and underparts yellowish buff." This style of coloring more nearly resembles that of *R. roxellanae* than of *R. bieti*, and the skull likewise is more as in the former species.

The Museum of Comparative Zoölogy has just acquired a skin and skull of this fine monkey, representing an adult male, from Tonkin, probably near the type locality. The coloration is slightly different from that described for the type, in which the entire ventral surface of the body is yellowish buff, extending down on the inner sides of the legs to the hands and feet. In this male specimen, however, the "yellowish buff" is reduced to a collar, encircling the throat, except for the black dorsal area of the neck. The chin, cheeks, chest, belly and inner sides of the limbs are *white* with a scattering of long black hairs. A very faint buffy wash may be seen on the chest and arms, but this is hardly noticeable.

The measurements of this adult male considerably exceed those of the adult female as given by Dollman. I have appended therefore the collector's measurements of the male, together with the cranial measurements, and in parentheses after each, the corresponding dimensions as given for the type. Head and body, 1420 mm. (520); tail, 860 (660); hind foot [from dry skin], 190 (165); ear, 43 (40). Skull: greatest length, 129 (109); basilar length, 83 (68); zygomatic breadth, 96 (77); greatest breadth across orbital region, 87.5 (72.5); greatest diameter of orbit, 30 (28); interorbital constriction, 17. (11); greatest width of cranium, 79 (68.3); palatilar length, 42 (32.9); width of palate inside m^1 , 24 (20.5); length of upper toothrow from front of first premolar to back of last molar, 31 (30).